

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number  
**WO 2005/051176 A3**

(51) International Patent Classification<sup>7</sup>: **A61B 17/08**

(21) International Application Number:  
PCT/US2004/039588

(22) International Filing Date:  
24 November 2004 (24.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/525,355 25 November 2003 (25.11.2003) US

(71) Applicant (for all designated States except US): **SUB-Q, INC.** [US/US]; 1062-D Calle Negocio, San Clemente, CA 92673 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ASHBY, Mark** [US/US]; 23962 Frigate Drive, Laguna Niguel, CA 92677 (US). **BERTOLET, Roy, D.** [US/US]; P.O. Box 73665, San Clemente, CA 92673 (US). **CRAGG, Andrew, H.** [US/US]; 5024 Bruce Place, Edina, MN 55424 (US). **TRAN, Tin Trong** [US/US]; 2856 East Alden Place, Anaheim, CA 92806 (US).

(74) Agents: **MILLER, Thomas, A.** et al.; Miller, Matthias & Hull, One North Franklin Street, Suite 2350, Chicago, IL 60606 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

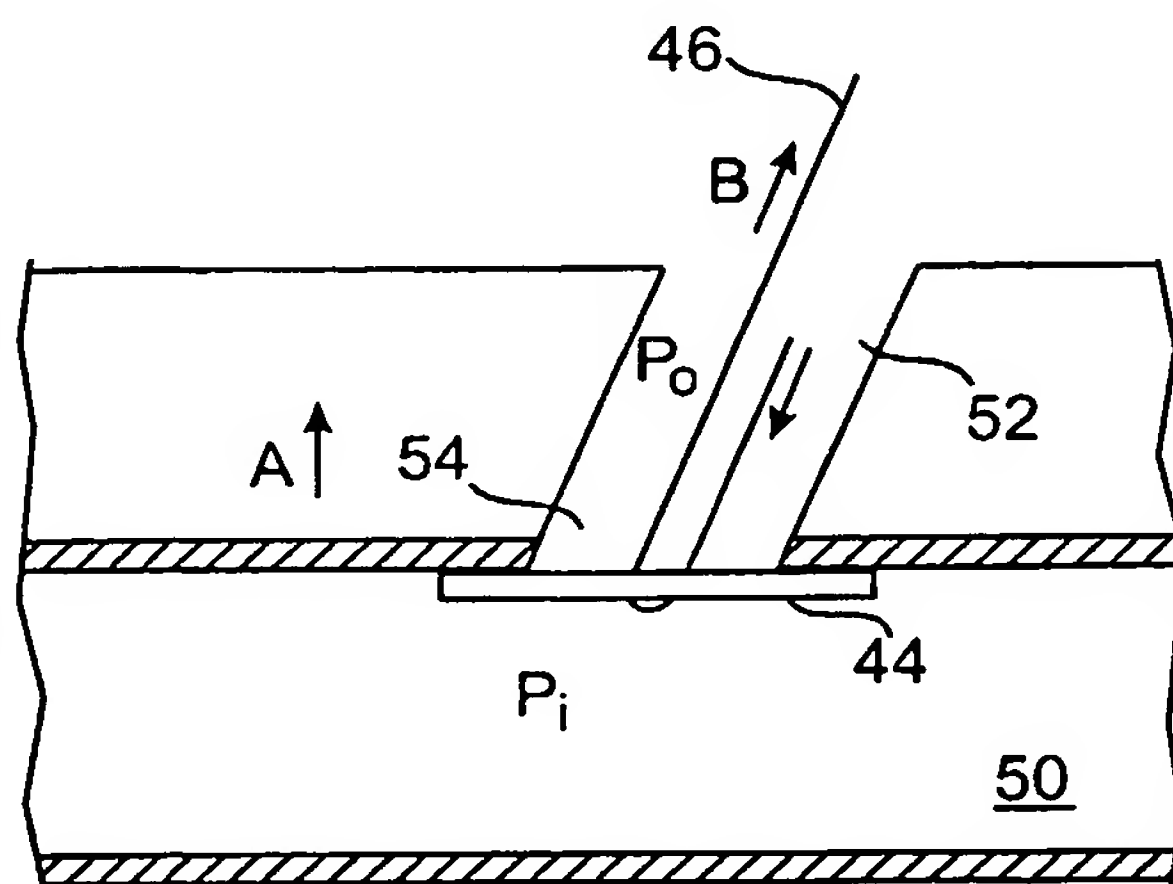
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
22 December 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **HEMOSTATIC PRESSURE PLUG**



(57) Abstract: An apparatus to intervascularly promote hemostasis at a blood vessel puncture site with an inner lumen pressure and an outer lumen pressure has a flexible plug having a center, a top surface, and a bottom surface, and a release mechanism coupled to the center to position and release the flexible plug intervascularly at the blood vessel puncture site. The inner lumen pressure is greater than the outer lumen pressure to forceably secure the flexible plug around the blood vessel puncture site.

WO 2005/051176 A3